past the climacterium, or with very large myomata; in these amenorrhea was produced; and younger women, or those with small myomata; in these a shrinkage of the tumor and a reduction but not complete cessation of menstruation was aimed at and attained. The average duration of treatment, including all interruptions, many of which were from causes in no way connected with the treatment itself, was three and one-quarter months. The dosage, reckoned on the basis of the total number of minutes that each patient was actually exposed to the rays during the entire treatment, was 234 to 307 "light minutes," according to the class of case, or, expressed in Kienbock's "X-Units," in which 10-X corresponds to an erythema-producing dose, the average of all cases was about 75-X required to produce a cure. Experience has shown that myoma cases require, other conditions being equal, a larger dosage than metropathia cases without tumor, and that cases of either class require a smaller dosage the more advanced the age of the patient, a result that was, of course, to be expected. The nearer together the sittings can be given the better seems to be the result. With the present highly developed technique very large doses can be given without bad effects, but in no case can the final result be attained in less than two months, as the injury to the ovaries produced by the *x*-rays does not become apparent until the first or second following menstruation.

The Appendix in Gynecology.—LEGUEU (*La Gynécologie*, 1911, xv, 145) states that he makes it a habit to remove every appendix when the abdomen has been opened, whether it appears diseased or not, provided its seeking and removal does not seriously increase the danger of the operation. He has recently examined microscopically a small series of appendices so removed in the course of gynecological operations, with the following results: Of 17 appendices removed during the course of a right-sided or double salpingectomy for salpingitis, 16 showed definite lesions, 15 of these being a peritoneal or subperitoneal inflammation, acute in character, and evidently occuring by way of the lymphatics. In some, but not all of these cases, an acute or chronic inflammation of the mucosa was also present. Of 13 appendices removed during operations for other gynecological affections (extra-uterine pregnancy, ovarian cyst, fibroids, etc.), 3 were normal; in the remaining 10 there were minor lesions without any demonstrable causal relation to the primary affection. Notwithstanding that in these cases the relation between the appendiceal lesion and the primary affection cannot be distinctly shown, as in the case of adnexal inflammations, Legueu recommends, nevertheless, that all appendices be removed in these cases as well, if merely from a prophylactic standpoint.

Compression of the Ureters in Genital Prolapse.—On the basis of two carefully studied postmortem specimens, one of partial and one of complete prolapsus uteri, HIROKAWA (*Deutsch. Zeitschr. f. Chir.*, 1911, cix, 1) has been able to show that a stagnation of the urinary flow, with dilatation of the ureters, reaching at times to the pelvis of the kidney, with the production of hydronephrosis, may occur as a result of compression of the ureters in cases of genital prolapse in woman. The point of compression is always situated in the lower portion of the ureter, not, however, as earlier writers have assumed, merely at the point of herniation through the pelvic musculature, but also above and below this point. Inside the true pelvis compression of the ureters can be caused by pressure from the bladder, the intra-abdominal portion of which is drawn down in a more or less funnel-shaped form into the likewise funnel-shaped pelvic outlet by the cystocele below. At the hernial opening in the ring musculature of the pelvic floor the ureters are, of course, liable to compression between the uterus and the neck of the cystocele on the one hand, and the muscle on the other, while below this point they are also compressed in the chronically inflamed, inelastic tissue forming the wall of the everted vaginal tube. Another factor in causing stagnation of the flow is the sharp upward bend which the ureters have to make just before entering the bladder, owing to the fact that in cystocele cases the trigonum is as it were turned upside-down, so that the ureter can no longer enter the bladder in an axis which is more or less the direct continuation of that of the latter part of its extravesical course, as is normally the case.

Ascending Kidney Tuberculosis.—BAUEREISEN (*Zeitschr. f. Gynäkol. Urologie,* 1911, ii, 276) reports the results of some experimental studies in this subject, injecting for this purpose small doses of human tubercle bacilli into the bladders of 21 guinea-pigs. Six of these developed isolated bladder tuberculosis, demonstrated pathologically, and one animal which still survived a year after injection presented certain clinical evidence of the same condition. In 3 of the animals the infection spread to the intramural portion of the ureters. In no case did it spread higher than this and affect the upper part of the ureters or the kidneys. In 9 female animals there was no spread of the infection to the genital organs, except in one case, where the outer layers of the vaginal wall were slightly affected, whereas in practically all the male animals the genital organs showed extensive involvement. As a result of these and previous experiments, in which the bovine form of the tubercle bacillus was used, the author reaches the conclusion that infection of the bladder can occur only in the presence of a relatively large epithelial defect, but is impossible with intact epithelium. He believes, further, that with unobstructed urinary flow a tuberculous infection of the bladder cannot spread through the ureter to the kidney, although infection of the intramural portion of the ureters was found in 3 of the experimental cases, explaining this on the ground that the lymph vessels of the ureter form a closed system, the current flowing from the mucosa to the adventitia, and then through descending branches to the regional glands. The part of the bladder in connection with the ureters contains lymph vessels, however, which are in communication with those of their intramural portions, so that the tubercle bacilli are carried into the outer layer of this portion of the ureter; but a further spread must take place against the current, this being possible only when the lymph flow is interfered with in some way, as by compression of the ureter. He maintains, therefore, that catheterization of the ureters is permissible even in cases of bladder tuberculosis, if every possible care is taken to avoid injuring the epithelium, believing that even if bacilli are carried into the ureter in this way, the current of urine will easily sweep them out again.